

IN THE CLAIMS:

Please cancel claims 24, 25, and 35-40; amend claims 1, 8, 9, 13, 16, 19, and 26; and add claims 41-51 as follows:

1. (Currently amended) A cooling unit to cool a heat generating component, comprising:
  - a heat sink arranged adjacent to said heat generating component;
  - a heat diffusing member arranged between said heat generating component and said heat sink, the heat diffusing member being attached to the heat generating component at a set relative position;
  - a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member; and
  - a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink.
2. (Original) The cooling unit according to claim 1, wherein said heat sink has area dimensions greater than said heat generating component.
3. (Original) The cooling unit according to claim 1, wherein said heat diffusing member has a thermal conductivity higher than said second heat conducting member and area dimensions greater than said heat generating component.
4. (Original) The cooling unit according to claim 1, further including a spring member to urge said heat diffusing member towards said heat generating component.

5. (Original) A cooling unit according to claim 1, wherein said first heat conducting member is less thick than said second heat conducting member, and said second heat conducting member is displaced in a direction of thickness.

6. (Original) A cooling unit according to claim 1, wherein said heat generating component has a radiation surface, and said heat diffusing member has a first thermal contact surface facing said radiation surface and a second thermal contact surface facing said heat sink, said first and second thermal contact surfaces each having an area larger than said radiation surface.

7. (Original) A cooling unit according to claim 6, wherein said heat diffusing member is urged toward said heat generating component by springs.

8. (Currently amended) A cooling unit according to claim 1, to cool a heat generating component, comprising:

a heat sink arranged adjacent to said heat generating component;

a heat diffusing member arranged between said heat generating component and said heat sink;

a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member;

a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink; and

wherein said heat generating component has a plurality of corners along an outer periphery, and said heat diffusing member has a plurality of engaging sections to

be engaged with the respective corners, a positional relationship of said heat generating component and said heat diffusing member being defined by mutual engagement of said corners and said engaging sections.

9. (Currently amended) A cooling unit according to claim 8, to cool a heat generating component, comprising:

a heat sink arranged adjacent to said heat generating component;  
a heat diffusing member arranged between said heat generating component and said heat sink, wherein said heat diffusing member has a plurality of tongues to be removably hooked to said heat generating component;

a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member; and

a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink.

10. (Original) A cooling unit according to claim 1, wherein said first heat conducting member has a thermal conductivity higher than said second heat conducting member.

11. (Original) A cooling unit according to claim 1, wherein said heat sink has a heat receiving portion held in contact with said second heat conducting member, and a heat exchanging portion thermally connected to said heat receiving portion and separated from said heat generating component.

12. (Original) A cooling unit according to claim 11, further including a fan

that feeds cooling air to at least said heat exchanging portion of said heat sink.

13. (Currently amended) A cooling unit, comprising:
- a semiconductor package having a heat generating IC chip and a base unit on which the IC chip is mounted;
- a heat sink arranged adjacent to said semiconductor package, said heat sink having area dimensions greater than said IC chip;
- a heat diffusing member arranged between said semiconductor package and said heat sink, the heat diffusing member being rigidly secured to the base unit;
- a first heat conducting member interposed between said IC chip of said semiconductor package and said heat diffusing member to thermally connect said IC chip and said heat diffusing member; and
- a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink; and
- ~~a gap between said IC chip and said heat diffusing member being narrower than a gap between said heat diffusing member and said heat sink, said heat diffusing member having a thermal conductivity higher than said second heat conducting member and area dimensions greater than said IC chip.~~

- 14-15. (Cancelled)
16. (Currently amended) A cooling unit according to claim 13, comprising:
- a semiconductor package having a heat generating IC chip wherein said semiconductor package has a base substrate bearing said IC chip mounted thereon[[],];

a heat sink arranged adjacent to said semiconductor package, said heat sink having area dimensions greater than said IC chip;

a heat diffusing member arranged between said semiconductor package and said heat sink, wherein [[and]] said heat diffusing member is rigidly secured to said base substrate;

a first heat conducting member interposed between said IC chip of said semiconductor package and said heat diffusing member to thermally connect said IC chip and said heat diffusing member;

a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink; and

a gap between said IC chip and said heat diffusing member being narrower than a gap between said heat diffusing member and said heat sink, said heat diffusing member having a thermal conductivity higher than said second heat conducting member and area dimensions greater than said IC chip.

17-18. (Cancelled)

19. (Currently amended) An electronic apparatus, comprising:  
a housing containing a heat generating component;  
a heat sink housed in said housing, said heat sink being arranged adjacent to said heat generating component, ~~said heat sink having area dimensions greater than said heat generating component;~~

a heat diffusing member arranged between said heat generating component and said heat sink, the heat diffusing member being attached to the heat generating

component at a set relative position;

a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member; and

a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink, ~~said heat diffusing member having a thermal conductivity higher than said second heat conducting member and area dimensions greater than said heat generating component.~~

20. (Original) An electronic apparatus according to claim 19, wherein a gap between said heat generating component and said heat diffusing member is narrower than a gap between said heat diffusing member and said heat sink, and said second heat conducting member is displaceable according to the gap between said heat diffusing member and said heat sink.

21. (Original) An electronic apparatus according to claim 19, further including a circuit substrate housed in said housing and bearing said heat generating component.

22-25. (Cancelled)

26. (Original) A cooling unit to cool a heat generating component, comprising:

a heat sink arranged adjacent to said heat generating component;

a base substrate upon which said heat generating component is affixed, said base substrate having four corners;

a heat diffusing member arranged between said heat generating component and said heat sink, said heat diffusing member having four engaging sections corresponding to the four corners of said base substrate to allow said base substrate to fit with said heat diffusing member;

a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member; and

a second heat conducting member interposed between said heat diffusing member and said heat sink to thermally connect said heat diffusing member and said heat sink.

27. (Original) The cooling unit according to claim 26, further including a spring member to urge said heat diffusing member towards said heat generating component.

28. (Original) The cooling unit according to claim 26, wherein said heat sink has area dimensions greater than said heat diffusing member, and said heat diffusion member has area dimensions greater than said heat generating component.

29-40. (Cancelled)

41. (New) The cooling unit according to claim 1, further including a fan to feed cooling air to the heat sink.

42. (New) The cooling unit according to claim 13, wherein a first gap between the IC chip and the heat diffusing member is narrower than a second gap between the heat diffusing member and the heat sink, the heat diffusing member having a thermal conductivity higher than the second heat conducting member and area dimensions

greater than the IC chip.

43. (New) The cooling unit according to claim 13, further including a fan to feed cooling air to the heat sink.

44. (New) The electronic apparatus according to claim 19, wherein the heat sink has area dimensions greater than the heat generating component.

45. (New) The electronic apparatus according to claim 19, wherein the heat diffusing member has a thermal conductivity higher than the second heat conducting member and area dimensions greater than the heat generating component.

46. (New) The electronic apparatus according to claim 19, further including a fan housed in the housing to feed cooling air to the heat sink.

47. (New) The cooling unit according to claim 26, further including a fan to feed cooling air to the heat sink.

48. (New) A cooling unit to cool a heat generating component having a plurality of corners along an outer periphery, comprising:  
a heat sink arranged adjacent to the heat generating component;  
a heat diffusing member arranged between the heat generating component and the heat sink, the heat diffusing member having a plurality of engaging sections to engage with the respective corners, a relative position of the heat generating component and the heat diffusing member being determined by mutual engagement of the corners and the engaging sections;

a first heat conducting member interposed between the heat generating component and the heat diffusing member to thermally connect the heat generating component and the heat diffusing member; and

a second heat conducting member interposed between the heat diffusing member and the heat sink to thermally connect the heat diffusing member and the heat sink.

49. (New) The cooling unit according to claim 46, wherein the heat diffusing member has a plurality of tongues removably hooked to the heat generating component.

50. (New) The cooling unit according to claim 1, wherein the heat generating component has a plurality of corners along an outer periphery, and the heat diffusing member has a plurality of engaging sections to be engaged with the respective corners, the set relative position of the heat generating component and the heat diffusing member being determined by a mutual engagement of the corners and the engaging sections.

51. (New) A cooling unit to cool a heat generating component affixed to a base substrate having four corners, comprising:

a heat sink arranged adjacent to said heat generating component;  
a heat diffusing member arranged between said heat generating component and said heat sink, said heat diffusing member having four engaging sections corresponding to the four corners of said base substrate to allow said base substrate to fit with said heat diffusing member;

a first heat conducting member interposed between said heat generating component and said heat diffusing member to thermally connect said heat generating component and said heat diffusing member; and

a second heat conducting member interposed between said heat diffusing

member and said heat sink to thermally connect said heat diffusing member and said heat sink.

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